



## CHEMIST I

### **CHARACTERISTICS OF WORK:**

This is professional work involving conducting chemical analyses in a chemical or public health laboratory. The analyses are based on standardized laboratory procedures that require exacting techniques to secure accurate and complete data. The work is done according to standard procedures and may involve the supervision of technical assistants. Assignments are generally received without specific instructions, but assistance is usually available for any special or unusual problem. Finished work may be checked upon completion by a superior or by a central laboratory.

### **MINIMUM QUALIFICATIONS:**

These minimum qualifications have been agreed upon by Subject Matter Experts (SMEs) in this job class and are based upon a job analysis and the essential functions. However, if a candidate believes he/she is qualified for the job although he/she does not have the minimum qualifications set forth below, he/she may request special consideration through substitution of related education and experience, demonstrating the ability to perform the essential functions of the position. Any request to substitute related education or experience for minimum qualifications must be addressed to the State Personnel Board in writing, identifying the related education and experience which demonstrates the candidate's ability to perform all essential functions of the position.

### **EXPERIENCE/EDUCATIONAL REQUIREMENTS:**

#### **Education:**

A Bachelor's Degree from an accredited four-year college or university in Chemistry;

### **PHYSICAL REQUIREMENTS:**

These physical requirements are not exhaustive, and additional job related physical requirements may be added to these by individual agencies on an as needed basis. Corrective devices may be used to meet physical requirements. These are typical requirements; however, reasonable accommodations may be possible.

**Moderate Work:** May frequently exert force equivalent to lifting up to approximately 25 pounds and/or occasionally exert force equivalent to lifting up to approximately 50 pounds.

**Vision:** Requires the ability to perceive the nature of objects by the eye.

**Near Acuity:** Clarity of vision at 20 inches or less.

**Midrange:** Clarity of vision at distances of more than 20 inches and less than 20 feet.

**Depth Perception:** Three-dimensional vision. Ability to judge distances and spatial relationships so as to see objects where and as they actually are.

**Ability to adjust focus:** Ability to adjust the eye to bring an object into sharp focus.

**Color Vision:** Ability to identify colors.

**Speaking/Hearing:** Possesses the ability to give and receive information through speaking and listening skills.

**Taste/Smell:** Possesses the ability to use the sense of smell to recognize and distinguish odors. Possesses the ability to use the sense of taste to recognize and distinguish flavors.

**Motor Coordination:** While performing the duties of this job, the incumbent is regularly required to sit; use hands to finger, handle, or feel objects, tools, or controls; and reach with hands and arms. The incumbent is frequently required to stand; and walk. The incumbent is occasionally required to climb or balance; and stoop, kneel, crouch, or bend.

### **COMPETENCIES:**

The following competencies describe the knowledge, skills, abilities, and attributes that lead to a successful employee in this position. An applicant will be expected to exhibit these competencies or the ability to reach competency achievement within a specified time. These competencies are linked to the essential functions of the job. Employees in this position may be evaluated on these competencies as part of the performance appraisal system. Example behaviors are listed below each competency and are used for illustrative purposes only. Specific behaviors may be identified and included later by the hiring agency. It is understood that some of these behaviors might not be acquired until a reasonable time after hire. Failure of an employee to successfully demonstrate some or all of these competencies, as deemed important by his or her reporting official, may result in the employee being placed on a performance improvement plan. If after a reasonable period of time, usually three (3) months, the employee fails to demonstrate successful performance, the employee may be terminated. These competencies include, but are not limited to, the following:

### **PUBLIC SECTOR COMPETENCIES:**

**Integrity and Honesty:** Demonstrates a sense of responsibility and commitment to the public trust through statements and actions.

Models and demonstrates high standards of integrity, trust, openness, and respect for others. Demonstrates integrity by honoring commitments and promises. Demonstrates integrity by maintaining necessary confidentiality.

**Work Ethic:** Is productive, diligent, conscientious, timely, and loyal.

Conscientiously abides by the rules, regulations, and procedures governing work.

**Service Orientation:** Demonstrates a commitment to quality public service through statements and actions.

Seeks to understand and meets and/or exceeds the needs and expectations of customers. Treats customers with respect, responding to requests in a professional manner, even in difficult circumstances. Provides accurate and timely service. Develops positive relationships with customers.

**Accountability:** Accepts responsibility for actions and results.

Is productive and carries fair share of the workload. Focuses on quality and expends the necessary time and effort to achieve goals. Demonstrates loyalty to the job and the agency and is a good steward of state assets. Steadfastly persists in overcoming obstacles and pushes self for results. Maintains necessary attention to detail to achieve high-level performance. Deals effectively with pressure and recovers quickly from setbacks. Takes ownership of tasks, performance standards, and mistakes. Has knowledge of how to perform one's job. Knows the organization's mission and functions and how it fits into state government.

**Self Management Skills:** Effectively manages emotions and impulses and maintains a positive attitude.

Encourages and facilitates cooperation, pride, trust, and group identity; fosters commitment and team spirit; works effectively and cooperatively with others to achieve goals. Treats all people with respect, courtesy, and consideration. Communicates effectively. Remains open to new ideas and approaches. Avoids conflicts of interest. Promotes cooperation and teamwork.

**Interpersonal Skills:** Shows understanding, courtesy, tact, empathy, and concern to develop and maintain relationships.

Demonstrates cross cultural sensitivity and understanding. Identifies and seeks to solve problems and prevent or resolve conflict situations. Encourages others through positive reinforcement.

**Communication Skills:** Receives, attends to, interprets, and responds to verbal messages and expresses information to individuals or groups effectively.

Receives other cues such as body language in ways that are appropriate to listeners and situations. Takes into account the audience and nature of the information; listens to others, attends to nonverbal cues, and responds appropriately. May make oral presentations. Communicates ideas, suggestions, and concerns, as well as outcomes and progress throughout the process of an activity. Provides thorough and accurate information.

**Self-Development:** Adapts behavior or work methods in response to new information, changing conditions, or unexpected obstacles.

Seeks efficient learning techniques to acquire and apply new knowledge and skills; uses training, feedback, or other opportunities for self-learning and development. Develops and enhances skills to adapt to changing organizational needs. Remains open to change and new information and ideas.

#### **TECHNICAL COMPETENCIES:**

**Chemical Analysis:** Possesses knowledge of the principles and practices of chemistry acquired through formal training and/or extensive on-the-job experience.

Receives, prepares, and analyzes various samples for chemical analyses and organic and/or inorganic components. Plans, organizes, and conducts professional-level quantitative and qualitative chemical analysis. Makes reports of the analysis of materials. Works out solutions to analytical problems. Analyzes petroleum chemicals, insecticides, acids, and chemicals of biological interest.

**Laboratory Participation:** Interacts with fellow chemists performing analyses in a laboratory.

Plans and outlines normal work activities and special projects. Interacts with chemists and laboratory assistants in the analysis of various materials, products, and substances. Requisitions and maintains laboratory equipment and supplies. Assists fellow chemists in applying and interpreting the more difficult analytical data and problems.

**Technical:** Is proficient in the use of scientific instrumentation and laboratory equipment.

Calibrates laboratory equipment, performs routine repairs on instruments and equipment, and coordinates other repairs with service contractors.

**ESSENTIAL FUNCTIONS:**

**Additional essential functions may be identified and included by the hiring agency. The essential functions include, but are not limited to, the following:**

1. Conducts chemical analyses in a chemical or public health laboratory.
2. Maintains chemical equipment.

**EXAMPLES OF WORK:**

**Examples of work performed in this classification include, but are not limited to, the following:**

Performs analyses in testing of road and bridge materials, such as tanks, bituminous products, cement, water, steel, iron, other metals, and other materials.

Analyzes samples of petroleum products and performs other tests as required.

Prepares and standardizes reagents.

Analyzes food, drugs, water, sewage, and all allied materials.

Performs chemical analyses of regulated beverages to facilitate enforcement of rules and regulations.

Performs general laboratory duties..

Participates in Quality Assurance Program.

Analyzes drinking water for both inorganic and organic contaminants.

Maintains equipment and apparatus used in chemical work.

Performs related or similar duties as required or assigned.

**INTERVIEW REQUIREMENTS:**

Any candidate who is called to an agency for an interview must notify the interviewing agency in writing of any reasonable accommodation needed prior to the date of the interview.